

Field Crops

Growing Season Weather Summary

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The 2004 growing season was generally characterized by weather extremes across Michigan, particularly the overabundance of precipitation. During the preceding winter, above average snowfall and snow cover provided protection for most overwintering crops against extreme cold. Colder than normal late winter temperatures kept fall-planted and perennial crops dormant through late March, when an upper air ridging pattern became established across the midwest. This ridge persisted through much of April and brought above normal temperatures and below normal precipitation totals. The abnormally mild and dry weather allowed rapid progress in early spring fieldwork activities and resulted in the completion of a significant portion of summer crop planting by the end of April.

During the first week in May, jet stream flow across North America took on a southwest to northeast configuration with a broad ridge along the U.S. border with Canada. A surface frontal boundary lingered in or near the State and ample Gulf of Mexico moisture transported northward on southerly winds resulted in persistent heavy rain and severe weather on an almost daily basis across Michigan through early June. Rainfall totals for May generally ranged from 4 to 10 inches or more, with heaviest totals reported across central and southern sections of the Lower Peninsula. The persistent wet weather led to major planting delays, soil nitrogen losses, and difficulties in post-planting herbicide applications. The length of the planting delays necessitated crop cultivar and variety switches in some cases.

Drier weather finally returned by mid-June, but cloudy and cool conditions slowed crop growth and evapotranspiration rates. The change in weather was associated with the development of an upper air troughing pattern across the Great Lakes region which persisted through much of July and August, resulting in prolonged unusually cool, dry weather. Average temperatures during August generally ranged from 3 to 6 degrees F. below normal, which made the month among the 10 coolest on record. The persistently cool

mid-summer and abnormally slow rates of crop growth and development raised concerns about some crops reaching maturity prior to the end of the growing season. This was especially true for late planted crops delayed by earlier wet weather.

During the first week in September, the mean jet stream pattern across the region changed again, with the formation of a large ridge across much of the central and eastern U.S. The upper air ridge persisted for much of the month and led to warmer and drier than normal weather in Michigan. Mean temperatures for the month ranged from 2 to 8 degrees F. above normal, caused a rapid acceleration in crop development, and likely spared growers significant reductions in yield and grain quality that might have occurred if the crops had failed to reach maturity before the end of the growing season. The lack of rainfall led to some crop moisture stress during the late summer especially on lighter soils, but ensured the drydown of mature crops prior to harvest. The first killing freeze of the fall occurred later than normal in northern sections of the State (the beginning of October) and near or slightly before climatological normal dates in southern sections (the first week of October). Relatively dry weather favored crop harvest activities through much of October, but a return of wetter than normal weather in late October and November resulted in major delays.

Overall, for the 5-month May to September period, precipitation totals ranged from slightly below normal levels in northern sections of the State to much above normal in the south. Mean temperatures for the period were deceptively close to normal, the result of the averaging out of prolonged periods of much warmer and much cooler than normal weather. Given the relatively cool temperatures of July and August, seasonal growing degree day accumulations were generally well below normal statewide, especially in northern sections of the State where totals in some locations were more than 20 percent below normal.

Field crops: Acres harvested and value of production, 2000-2004

Item	Unit	2000	2001	2002	2003	2004
Acres harvested	1,000 acres	6,586	6,378	6,386	6,433	6,384
Value of production	1,000 dollars	1,428,519	1,276,403	1,720,760	1,768,563	1,588,393

Grain storage capacity, December 1, 2000-2004

Year	Off farm		On farm capacity
	Facilities	Rated capacity	
	<i>Number</i>	<i>Million bushels</i>	<i>Million bushels</i>
2000	250	141	240
2001	245	146	240
2002	235	148	240
2003	220	145	240
2004	215	150	250

Field crops: Record highs and lows

Crop	Unit	Record high		Record low		Year estimates started
		Quantity	Year	Quantity	Year	
Barley						
Harvested acres	1,000 acres	303	1932	12	2000,2001,2004	1866
Yield per acre	Bushels	68.0	1985	13.5	1933	
Production	1,000 bu	8,400	1918	546	1866	
Dry Edible beans						
Harvested acres	1,000 acres	690	1930	130	2001	1909
Yield per acre	Pounds	2,100	1999	320	1917	
Production	1,000 cwt	8,585	1963	780	2001	
Corn for grain						
Harvested acres	1,000 acres	2,800	1981	480	1866	1866
Yield per acre	Bushels	134.0	2004	21.5	1917	
Production	1,000 bu	293,180	1982	15,120	1869	
Corn for silage						
Harvested acres	1,000 acres	498	1971	210	2003	1924
Yield per acre	Tons	18.0	2004	4.7	1930	
Production	1,000 tons	5,565	1977	1,542	1930	
Hay, alfalfa						
Harvested acres	1,000 acres	1,444	1950	74	1919	1919
Yield per acre	Tons	4.2	1993	1.1	1934	
Production	1,000 tons	5,040	1985,1986	118	1919	
Hay, all						
Harvested acres	1,000 acres	2,947	1924	780	1866	1866
Yield per acre	Tons	3.8	1993	0.6	1895	
Production	1,000 tons	5,743	1986	1,014	1866	
Oats						
Harvested acres	1,000 acres	1,658	1918	55	2001	1866
Yield per acre	Bushels	70.0	2003	18.5	1921	
Production	1,000 bu	69,388	1946	3,520	2001	
Potatoes						
Harvested acres	1,000 acres	374.0	1895	36.4	1975	1866
Yield per acre	Cwt	330.0	2003	26.0	1887,1916	
Production	1,000 cwt	23,256	1904	3,557	1876	
Soybeans						
Harvested acres	1,000 acres	2,130	2001	1	1930	1924
Yield per acre	Bushels	40.0	1995,1999	8.0	1927	
Production	1,000 bu	78,540	2002	10	1930	
Spearment						
Harvested acres	1,000 acres	8.7	1954	0.7	1935	1935
Yield per acre	Pounds	50.0	2001,2002	20.0	1965	
Production	1,000 lbs	280	1948	27	1996	
Sugarbeets						
Harvested acres	1,000 acres	190	1999	48	1943,1953	1909
Yield per acre	Tons	21.3	1970	5.5	1916	
Production	1,000 tons	3,534	1999	298	1943	
Wheat, winter						
Harvested acres	1,000 acres	1,515	1953	400	1987	1909
Yield per acre	Bushels	72.0	2000	10.5	1912	
Production	1,000 bu	45,600	1984	7,350	1912	

Barley

Michigan barley growers planted 14,000 acres and harvested 12,000 acres in 2004. Total production was 612,000 bushels, down 22 percent from 2003. The average yield decreased 5 bushels to 51 bushels per acre. Barley planting got off to a good start across the State and stayed comparable with the 5-year average. Cool, wet weather slowed emergence of early plantings, but the crop

ultimately caught up with the historical progress. Going into harvest, almost half of the crop was rated good to excellent. Harvest began later than normal, and the early going was slowed by late summer rain showers. Harvest wrapped up by the middle of September.

Barley: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2000	13	12	60	720	1.10	792
2001	15	12	56	672	1.50	1,008
2002	14	13	51	663	1.60	1,061
2003	15	14	56	784	1.70	1,333
2004	14	12	51	612	1.50	918

¹ Marketing year average.

Corn

There were 2.2 million acres planted to corn in 2004, down 50,000 acres from 2003. Grain corn production was 257.3 million bushels, down 1 percent from 2003; 1.92 million acres were harvested for grain. The yield of 134 bushels per acre was up 6 bushels from the 2003 crop. Farmers harvested 265,000 acres of corn for silage with an average yield of 18.0 tons per acre.

Planting of corn in Michigan began in earnest about April 15, a week ahead of average. Extremely wet weather during May slowed progress, and by the end of May it was a week behind normal. Planting was not completed by mid-June, causing some acres originally intended to corn to be switched to soybeans. The yield prospects were above average by early summer. The crop growth progress was about normal despite late planting. About two-thirds of the crop had silked by August 1 compared with a 5-year average of 69 percent. Uneven maturity within fields, however, was common, due to spring flooding. There were no significant moisture shortages. Below normal temperatures throughout August

slowed plant growth, and the crop was about 10 days behind the average stage of development as of September 1. Above normal temperatures throughout September significantly improved production prospects. Nearly 90 percent of the corn had denting by Oct. 1, near the normal crop progress. Nearly half of the crop was rated in good-excellent condition. The harvest of corn for grain began the last week of September. It was half completed by Nov. 1, just slightly behind normal. Many producers delayed combining until grain dried further. By the end of the month, nearly 10 percent of the acres remained unharvested. Consistent rainfall during the growing season across virtually all major corn regions resulted in a state record yield.

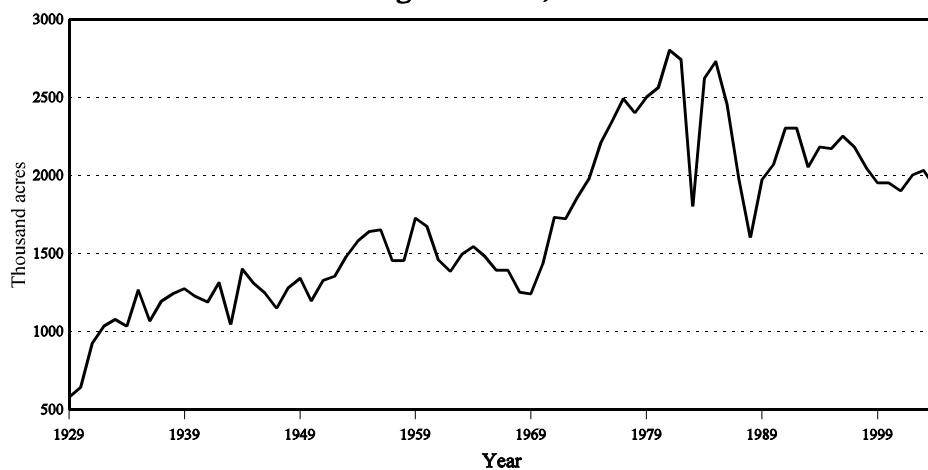
The 2004 corn crop was valued at \$463 million, down 25 percent from 2003. Corn continued to be Michigan's number one crop in value of production. The top three counties in corn production in 2004 were Huron, Lenawee, and Tuscola.

Corn: Acres, yield, production, and value, 2000-2004

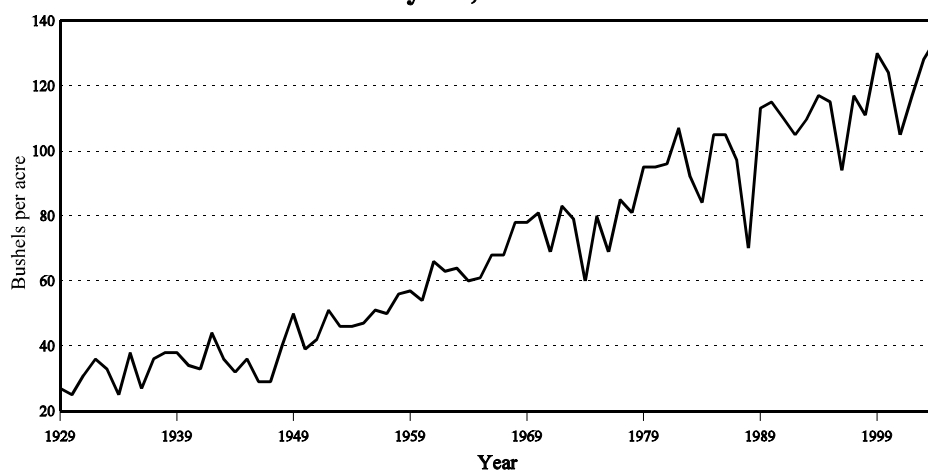
Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
All						
2000	2,200					
2001	2,200					
2002	2,250					
2003	2,250					
2004	2,200					
Grain						
2000		1,950	124	241,800	1.90	459,420
2001		1,900	105	199,500	1.97	393,015
2002		2,000	117	234,000	2.34	547,560
2003		2,030	128	259,840	2.37	615,821
2004		1,920	134	257,280	1.80	463,104
Silage						
2000		230	14.0	3,220		
2001		280	13.0	3,640		
2002		240	15.0	3,600		
2003		210	16.0	3,360		
2004		265	18.0	4,770		

¹ Marketing year average.

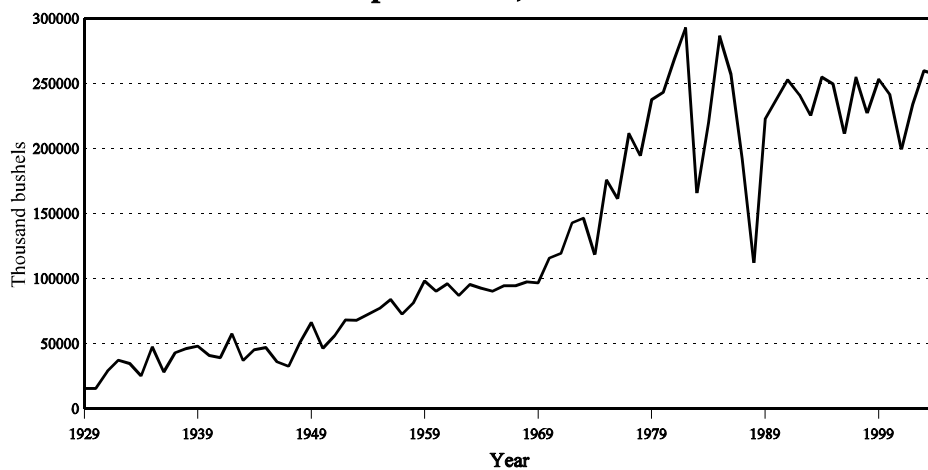
Corn for grain acres, 1929-2004



Corn yield, 1929-2004



Corn production, 1929-2004



Corn for grain: Stocks by quarter, 2000-2004

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
2000	145,000	58,200	90,000	46,800	55,000	24,800	21,000	12,500
2001	120,000	55,700	80,000	46,700	54,000	29,050	16,000	13,600
2002	130,000	59,800	88,000	46,700	40,000	27,600	13,000	9,750
2003	140,000	56,500	77,000	51,300	43,000	34,600	16,000	13,200
2004	140,000	59,000	100,000	48,200	59,000	30,850		

Corn: Percentage of acreage planted, 2000-2004

Year	Month and day						
	April		May			June	
	20	30	10	20	30	10	
2000	0	5	46	73	85	94	
2001	0	14	62	81	93	100	
2002	0	9	34	54	81	96	
2003	0	11	33	48	83	98	
2004	8	34	61	68	77	90	
5-year-average	1.6	14.6	47.2	64.8	83.8	95.6	

Corn: Percentage of acreage silked, 2000-2004

Year	Month and day					
	July			August		
	1	10	20	30	10	20
2000	0	1	15	53	81	94
2001	0	2	22	66	91	100
2002	0	0	8	63	88	98
2003	0	0	3	40	86	98
2004	0	1	27	61	74	86
5-year-average	0.0	0.8	15.0	56.6	84.0	95.2

Corn: Percentage of acreage dent stage, 2000-2004

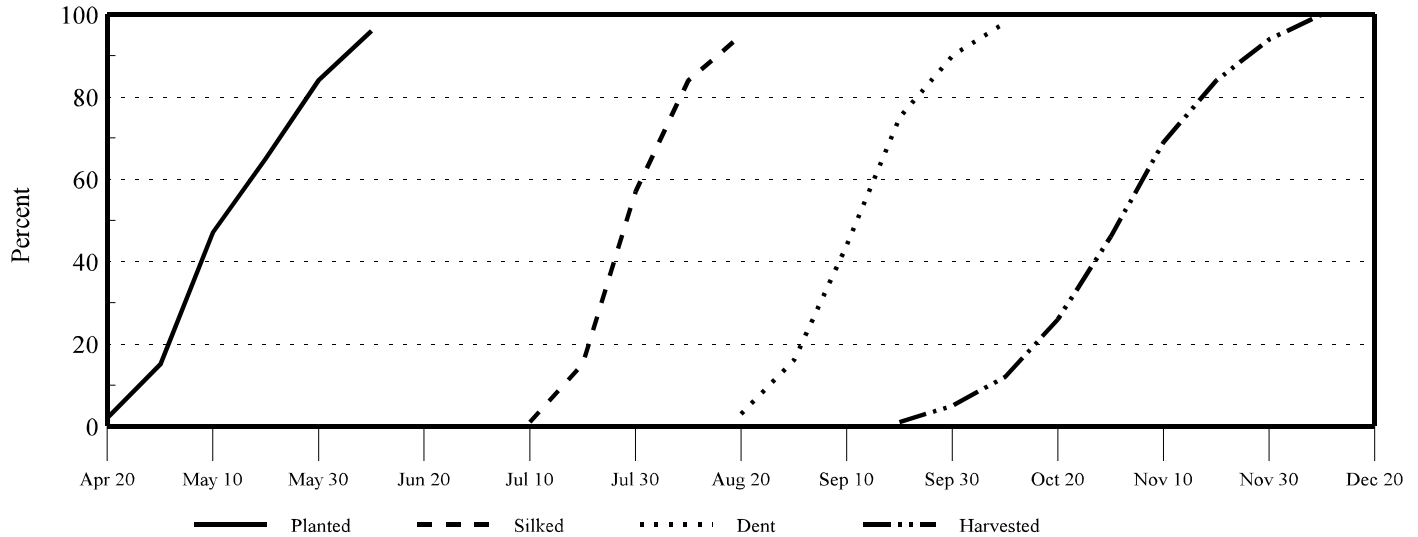
Year	Month and day						
	August			September			October
	10	20	30	10	20	30	10
2000	0	3	10	33	73	86	98
2001	0	10	25	52	76	93	98
2002	0	2	16	62	96	98	100
2003	0	1	16	40	73	91	99
2004	0	1	11	34	58	82	96
5-year-average	0.0	3.4	15.6	44.2	75.2	90.0	98.2

Corn: Percentage of acreage harvested for grain, 2000-2004

Year	Month and day									
	September			October			November			December
	10	20	30	10	20	30	10	20	30	10
2000	0	0	3	8	24	40	70	81	94	100
2001	0	3	7	14	27	41	62	87	94	100
2002	0	3	8	20	34	63	89	94	97	100
2003	0	0	3	7	19	37	54	78	91	100
2004	0	0	3	13	25	49	68	82	93	100
5-year-average	0.0	1.2	4.8	12.4	25.8	46.0	68.6	84.4	93.8	100.0

Corn progress

Five-year-average, 2000-2004



Dry Edible Beans

Dry bean planting began the first week of June, normal for Michigan. Good growing conditions were prevalent during the season and over half of the crop rated good to excellent by August. Growing conditions in September were near optimal for the maturing dry bean crop with sun and warm weather helping to overcome the summer's below normal growing degree days. Harvest began the third week in September, later than normal. Continued fair weather aided progress and by the first of October, harvest was ahead of normal at 80 percent of the crop harvested.

Michigan's 2004 total dry bean production was 3.1 million hundredweight (cwt), which represented 18 percent of U.S. production. Michigan ranked second in dry bean production for 2004, compared to third last year. The number one dry bean producer in the nation was North Dakota with 4.8 million cwt, which was lower than normal due to earlier than normal frost conditions.

Dry edible beans: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Pounds</i>	<i>1,000 cwt</i>	<i>Dol/cwt</i>	<i>1,000 dollars</i>
2000	285	275	1,500	4,125	13.70	56,513
2001	215	130	600	780	24.60	19,188
2002	270	265	1,850	4,903	15.30	75,016
2003	170	165	1,500	2,475	19.30	47,768
2004	190	185	1,700	3,145	22.80	71,706

¹ Marketing year average.

Dry edible beans: Acres, yield, and production, by class, 2000-2004

Class and Year	Planted	Harvested	Yield	Production
	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>1,000 cwt</i>
Black				
2000	55,000	53,000	1,580	840
2001	63,000	52,000	640	335
2002	110,000	108,000	1,880	2,030
2003	45,000	43,000	1,580	680
2004	74,000	73,000	1,770	1,290
Cranberry				
2000	26,000	25,000	1,520	380
2001	26,000	12,000	580	70
2002	20,000	19,000	1,530	290
2003	12,000	12,000	1,180	142
2004	9,500	9,000	1,440	130
Great Northern				
2001	8,000	3,500	570	20
2002	3,000	3,000	2,000	60
2003	8,000	8,000	1,680	134
2004	1,000	1,000	1,600	16
Navy				
2000	125,000	120,000	1,500	1,800
2001	65,000	30,000	570	170
2002	85,000	84,000	1,930	1,620
2003	40,000	38,000	1,560	592
2004	55,000	54,000	1,800	970
Pinto				
2000	21,000	20,000	1,450	290
2001	7,000	4,500	510	23
2002	9,500	9,500	1,930	183
2003	11,000	10,500	1,430	150
2004	7,000	6,500	1,710	111
Red kidney, dark				
2000	12,000	12,000	1,520	182
2001	9,000	7,000	430	30
2002	8,500	8,000	1,630	130
2003	9,000	9,000	1,330	120
2004	7,000	6,500	1,230	80
Red kidney, light				
2000	19,000	19,000	1,500	285
2001	18,000	11,000	770	85
2002	15,000	14,500	1,790	260
2003	16,000	15,500	1,540	239
2004	15,000	14,500	1,460	212
Small, red				
2000	8,000	8,000	1,410	113
2001	12,000	6,500	420	27
2002	11,000	11,000	1,890	208
2003	19,000	19,000	1,470	280
2004	15,500	15,000	1,740	261
Other				
2000	19,000	18,000	1,310	235
2001	7,000	3,500	570	20
2002	8,000	8,000	1,530	122
2003	10,000	10,000	1,380	138
2004	6,000	5,500	1,360	75

Hay and Haylage

Michigan hay production was estimated at 3.27 million tons, up 5 percent from 2003. Alfalfa and alfalfa mixtures accounted for 83 percent of all dry hay produced. All hay harvested acres were estimated at 1.10 million, up from 1.05 million in 2003. The average all hay yield was 2.97 tons per acre, the same as 2003. Alfalfa stands overwintered well this past year. There was plenty of moisture for the other hay crop which was ready for harvest by mid to late May. With additional wet weather in June, farmers looked

to put up haylage instead of hay as the hay crop was maturing past its prime. From mid-August and into October, dry conditions persisted, limiting the growth of third and fourth crop hay. Alfalfa accounted for 850,000 acres of the total harvested with a yield of 3.2 tons per acre. Other hay accounted for 250,000 acres with a yield of 2.2 tons per acre. Value of the hay crop was \$302.9 million, up 3 percent from 2003.

Hay, haylage, and greenchop: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Tons</i>	<i>1,000 tons</i>	<i>Dollars</i>	<i>1,000 dollars</i>
All dry hay						
2000		1,300	3.33	4,330	62.50	272,040
2001		1,150	3.14	3,610	70.50	253,510
2002		1,100	3.23	3,551	84.50	297,801
2003		1,050	2.97	3,120	93.00	295,240
2004		1,100	2.97	3,270	93.50	302,890
Alfalfa hay						
2000		1,000	3.70	3,700	64.50	238,650
2001		900	3.40	3,060	73.50	224,910
2002		870	3.50	3,045	86.50	263,393
2003		850	3.20	2,720	97.00	263,840
2004		850	3.20	2,720	97.00	263,840
Alfalfa seedings						
2000	140					
2001	100					
2002	125					
2003	130					
2004	135					
Other hay						
2000		300	2.10	630	53.00	33,390
2001		250	2.20	550	52.00	28,600
2002		230	2.20	506	68.00	34,408
2003		200	2.00	400	78.50	31,400
2004		250	2.20	550	71.00	39,050
All haylage and greenchop						
2000		310	5.76	1,785		
2001		340	5.82	1,980		
2002		280	6.05	1,694		
2003		270	5.50	1,486		
2004		367	5.94	2,179		
Alfalfa haylage and greenchop						
2000		280	6.00	1,680		
2001		320	6.00	1,920		
2002		260	6.20	1,612		
2003		250	5.60	1,400		
2004		325	6.20	2,015		

¹ Marketing year average.

Hay: Stocks on farms, 2001-2005

Year	May 1	December 1
	<i>1,000 tons</i>	<i>1,000 tons</i>
2001	1,000	3,450
2002	773	2,024
2003	462	1,872
2004	250	1,893
2005	500	

Maple Syrup

Michigan maple syrup production was estimated at 58,000 gallons for the 2005 season, 22,000 gallons below the 2004 output. This was a very short season for Michigan maple syrup producers due to adverse weather conditions. Sap flowed an average of 16 days compared to 26 days in 2004. About 56 percent of the syrup produced was medium in color.

Michigan ranked sixth in maple syrup production in 2004, unchanged from last year and produced about 5 percent of the total

U.S. production. Total taps were 390,000 and the syrup yield was 0.149 gallons per tap. In 2004, Michigan producers sold 60 percent of their syrup retail, 23 percent wholesale, and 17 percent bulk. The average price per gallon for 2004 was \$38.00 compared with \$31.20 in 2003. The value of production for 2004 was \$3.04 million, up 7 percent from 2003.

Maple syrup: Taps, yield, production, price, and value, 2001-2005

Year	Taps	Yield per tap	Production	Price per gallon	Value of production
	<i>1,000</i>	<i>Gallons</i>	<i>1,000 gallons</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2001	350	0.186	65	29.70	1,931
2002	365	0.205	75	32.50	2,438
2003	360	0.164	59	31.20	1,841
2004	370	0.216	80	38.00	3,040
2005	390	0.149	58	(¹)	(¹)

¹ Published in June 2006.

Mint

Mint: Acres, yield, production, and value, 2000-2004

Year	Harvested	Yield	Production	Price per pound ¹	Value of production
	<i>1,000 acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>1,000 dollars</i>
Peppermint					
2000	1.0	50	50	9.20	460
2001	1.0	50	50	9.90	495
2002	0.8	50	40	10.00	400
2003	1.1	40	44	11.00	484
2004	1.0	45	45	10.90	491
Spearmint					
2000	1.7	45	77	9.20	708
2001	1.7	50	85	9.80	833
2002	1.6	50	80	9.00	720
2003	1.6	40	64	9.50	608
2004	1.6	45	72	9.30	670

¹ Marketing year average.

Oats

Oat acreage declined in Michigan during 2004. Growers planted 80,000 acres of oats in 2004 compared with 90,000 the year before. Harvested acres, at 65,000, were also down 10,000 from last year. The 2004 oat production was 4.42 million bushels, down 16 percent from the previous year. Yields, at 68 bushels per acre, were off 2 bushels from last year's record high. Dry weather in late April and early May allowed growers to get much of the crop planted ahead of normal. The crop emerged on schedule, but

progress was slowed by above normal rainfall. Harvest began the end of July with about half of the crop rated good to excellent. Combining was slowed by cool, damp conditions which kept progress well under the 5-year average. Harvest wrapped up in the middle of September. For 2004, Sanilac county again ranked first in oat production. Montcalm, Isabella, Shiawassee and Huron rounded out the top five counties.

Oats: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2000	95	75	64	4,800	1.30	6,240
2001	70	55	64	3,520	1.80	6,336
2002	80	65	64	4,160	1.80	7,488
2003	90	75	70	5,250	1.65	8,663
2004	80	65	68	4,420	1.60	7,072

¹ Marketing year average.

Potatoes

Michigan's 2004 potato production was 13.65 million hundredweight (cwt) down from 15.02 million in 2003. Planted acres were 43,000 and harvested acres were 42,000. The State's average yield was 325 cwt per acre, down from 2003's record high yield of 330 cwt. Potato planting began in the middle of April. Above normal precipitation in May delayed planting progress and slowed emergence. Several areas were forced to replant. Growers faced varying levels of disease and insect pressure. Potato harvest began in late July and was wrapped up by the end of October.

For 2004, Michigan again ranked ninth among States for potato production. Most Michigan potatoes are whites, which comprised approximately 84 percent of planted acreage, followed by russets and reds at 13 and 3 percent of planted acreage, respectively. Whites are processed for potato chips or sold for table use, while russets are used for french fries and other frozen products.

Fall potatoes: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Cwt</i>	<i>1,000 cwt</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2000	49.0	47.5	315	14,963	6.70	100,252
2001	46.0	45.0	310	13,950	7.65	106,718
2002	46.5	45.5	305	13,878	7.80	108,248
2003	46.0	45.5	330	15,015	7.05	105,856
2004	43.0	42.0	325	13,650	6.70	91,455

¹ Marketing year average.

Fall potatoes: Stocks by type as percent of total stocks, December 1, 2000-2004

Type	2000	2001	2002	2003	2004
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
White	86	90	88	86	89
Russet	12	9	11	13	10
Red	2	1	1	1	1

Fall potatoes: Production and disposition, 2000-2004

Crop year	Production	Total used for seed	Farm Disposition		Sold
			Seed, feed, and home use	Shrinkage and loss	
	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>
2000	14,963	1,099	250	1,700	13,013
2001	13,950	1,181	245	945	12,760
2002	13,878	1,099	205	1,400	12,273
2003	15,015	1,060	265	1,680	13,070
2004	13,650	(¹)	(¹)	(¹)	(¹)

¹ Published in September 2005

Fall potatoes: Stocks, 2000-2004

Crop year	December 1	January 1	February 1	March 1	April 1	May 1
	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>
2000	8,700	6,900	5,200	3,400	1,500	700
2001	8,200	6,200	4,800	3,200	1,500	400
2002	7,900	6,500	5,600	4,500	2,900	1,000
2003	9,200	7,700	6,200	5,100	3,200	1,500
2004	8,600	6,900	5,300	3,900	2,700	1,100

Soybeans

Michigan soybean production totaled 75.2 million bushels, up 37 percent from 2003. The yield was 38 bushels per acre in 2004. Planted acres remained unchanged from 2003. Harvest acres declined from 1.99 million to 1.98. The soybean planting season started off with dry conditions for early plantings. Heavy rains and saturated soil delayed planting. By June 1, 47 percent was planted compared to a normal of 65 and some water damage was reported. As of August 2, the crop was at 60 percent bloom compared to 77 percent average. Some growers reported problems with aphids. On August 29, 87 percent were setting pods compared to a 94 percent 5-year average. Soil moisture was adequate all summer for the most part but cool conditions slowed development. Growers reported

soybean plants were short in some areas. September growing conditions were near optimal for the rapidly maturing soybean crop. Sun and warm weather helped offset the summer's below normal growing degree days and aided dry down of the crop. Harvest began the third week in September, on par with normal. By October 1, 13 percent of the crop was harvested, equal to the 5-year average. As of November 1, 70 percent of the crop was harvested. November harvest progressed slowly due to rains, which made it hard for farmers to get in the fields to finish harvesting. Lenawee, Sanilac, Saginaw, Clinton, and Monroe were the top five counties in soybean production.

Soybeans: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2000	2,050	2,030	36.0	73,080	4.54	331,783
2001	2,150	2,130	30.0	63,900	4.47	285,633
2002	2,050	2,040	38.5	78,540	5.62	441,395
2003	2,000	1,990	27.5	54,725	7.30	399,493
2004	2,000	1,980	38.0	75,240	5.05	379,962

¹ Marketing year average.

Soybeans: Stocks by quarter, 2000-2004

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
2000	30,000	19,800	18,000	9,600	8,500	3,225	2,400	1,220
2001	30,000	20,800	18,000	11,750	7,700	5,450	1,200	1,700
2002	26,000	21,000	16,000	13,450	9,100	5,680	2,800	1,300
2003	18,000	16,900	7,300	8,200	3,200	2,200	900	685
2004	35,000	21,550	22,000	10,500	7,600	6,600		

Soybeans: Percentage of acreage planted, 2000-2004

Year	Month and day							
	May			June			July	
	10	20	30	10	20	30	10	
2000	12	29	42	63	82	94	100	
2001	31	58	75	80	91	96	100	
2002	16	26	59	88	98	100	100	
2003	7	18	55	83	97	100	100	
2004	24	35	45	72	87	97	100	
5-year-average	18.0	33.2	55.2	77.2	91.0	97.4	100.0	

Soybeans: Percentage of acreage setting pods, 2000-2004

Year	Month and day						
	July			August			
	10	20	30	10	20	30	
2000	0	4	20	42	74	86	
2001	0	15	46	70	84	94	
2002	0	4	29	62	95	100	
2003	0	2	16	50	82	97	
2004	0	7	23	49	76	88	
5-year-average	0.0	6.4	26.8	54.6	82.2	93.0	

Soybeans: Percentage of acreage shedding leaves, 2000-2004

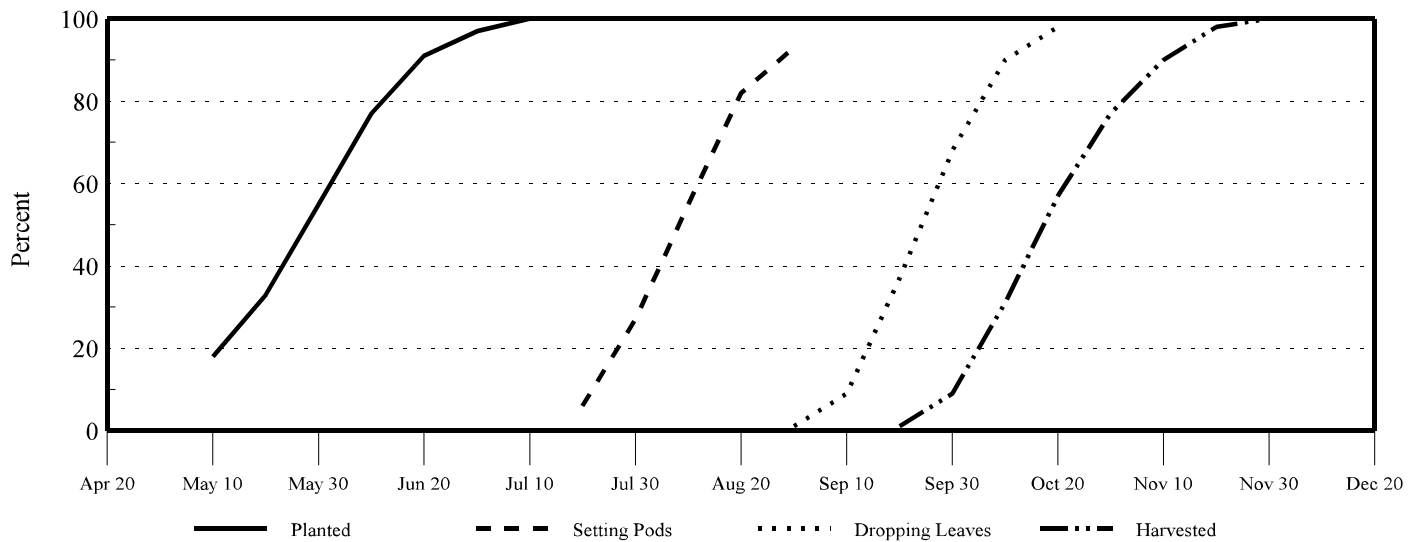
Year	Month and day						
	August		September			October	
	20	30	10	20	30	10	20
2000	0	0	3	26	54	78	93
2001	0	4	18	47	64	87	99
2002	0	0	17	52	89	99	100
2003	0	0	5	44	80	97	100
2004	0	0	4	18	52	91	96
5-year-average	0.0	0.8	9.4	37.4	67.8	90.4	97.6

Soybeans: Percentage of acreage harvested, 2000-2004

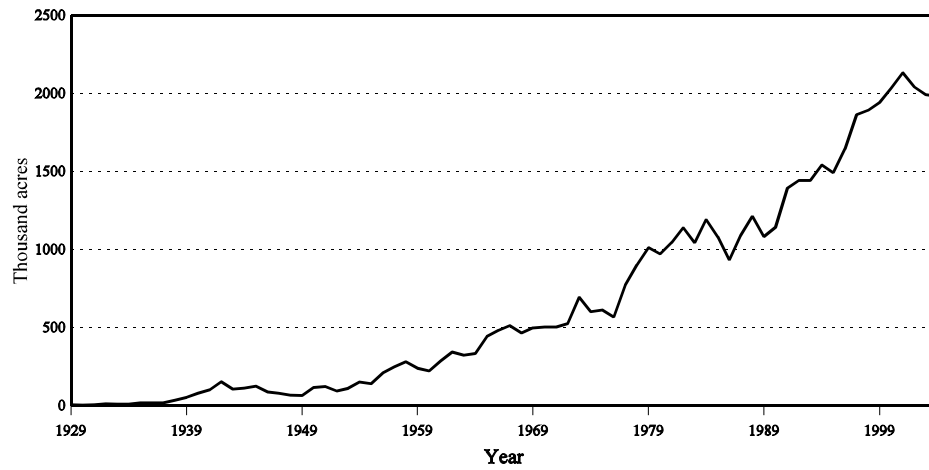
Year	Month and day								
	September			October			November		
	10	20	30	10	20	30	10	20	30
2000	0	0	3	15	48	76	92	100	100
2001	0	1	6	18	36	57	79	96	100
2002	0	4	20	45	73	93	100	100	100
2003	0	0	7	35	72	91	98	100	100
2004	0	1	11	40	58	69	81	96	100
5-year-average	0.0	1.2	9.4	30.6	57.4	77.2	90.0	98.4	100.0

Soybean progress

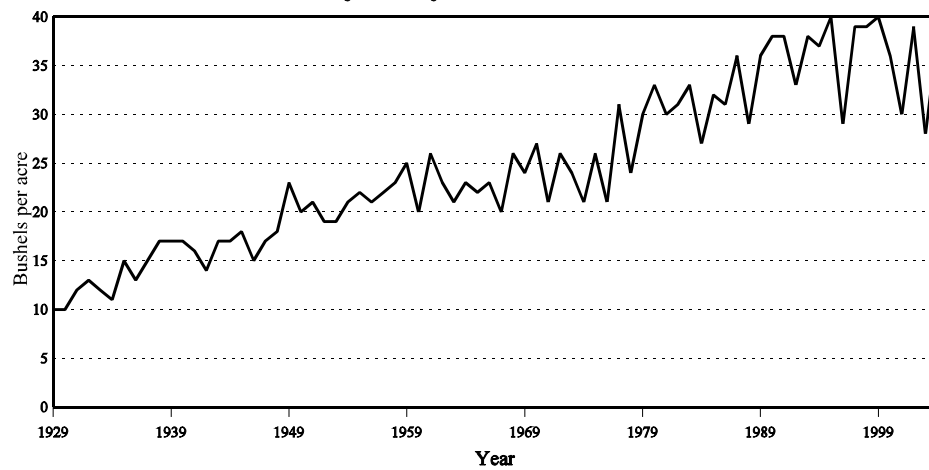
Five-year-average, 2000-2004



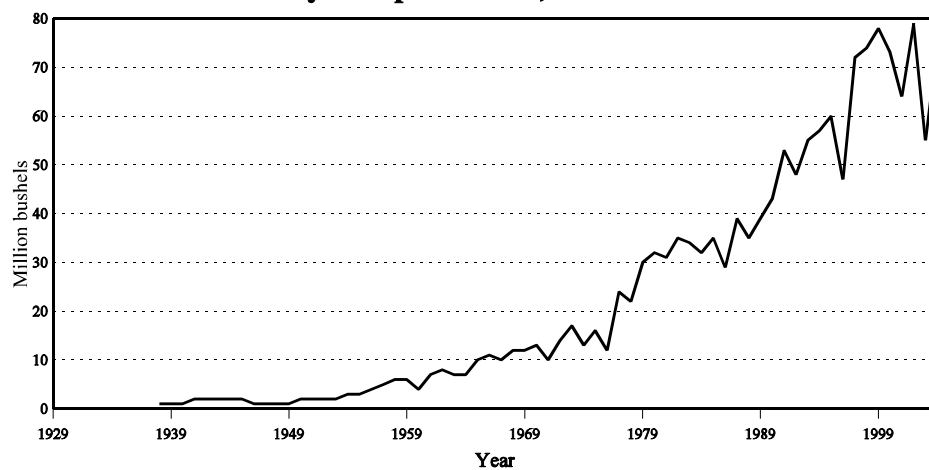
Soybean harvested acres, 1929-2004



Soybean yield, 1929-2004



Soybean production, 1929-2004



Sugarbeets

Acres planted to sugarbeets were estimated at 165,000, down 14,000 acres from the previous year. Harvested acreage was estimated at 163,000, down from 178,000 in 2003. Michigan's sugarbeet yield, at 21.1 tons per acre, was up 2 tons from last year's estimate. Planting of sugarbeet acres was mostly completed by early May, but some acres needed to be replanted due to wet weather and windy conditions damaging seedlings. The crop progressed well through most of the summer and early fall,

although there were some reports of compaction and poor root development. Cercospora appeared during the summer, but through spraying and cool temperatures, damage was limited. Harvest proceeded slowly during warm weather in early October, but picked up the pace as cooler temperatures allowed stockpiling. The crop was mostly harvested by early November.

Sugarbeets: Acres, yield, production, and value, 2000-2004

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Tons</i>	<i>1,000 tons</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2000	189	166	20.5	3,403	31.30	106,514
2001	180	166	19.4	3,220	34.80	112,056
2002	179	177	18.1	3,204	38.20	122,393
2003	179	178	19.1	3,400	36.70	124,780
2004	165	163	21.1	3,439	(²)	(²)

¹ Marketing year average.

² Published in February 2006.

Wheat

Michigan's 2004 winter wheat crop totaled 40.96 million bushels, down 3.9 million bushels from 2003. Planted acres were down slightly from 680,000 acres the previous year to 660,000. Harvested acreage was at 640,000 acres. The average yield was 64 bushels per acre. The value of the crop declined 16 percent to \$123 million. Huron, Sanilac, Tuscola, Lenawee and Saginaw were the top five counties in wheat production.

Winter wheat planting began on schedule and tracked the 5-year average. Emergence lagged behind normal until late fall rain showers helped speed along germination. The crop over-wintered

well, with over three-fourths of the acres rated good to excellent at the end of April. The crop developed rapidly; by the middle of June, most of the crop was headed. Above average rainfall during the critical flowering period led to disease problems in the crop. Severity was highly variable by geographic region.

By the second week in July, 94 percent of the crop had turned yellow and harvesting began. Showers and wet ground delayed progress. Dry weather in late July and early August helped growers wrap up their combining.

Wheat: Acres, yield, production, and value, 2000-2004

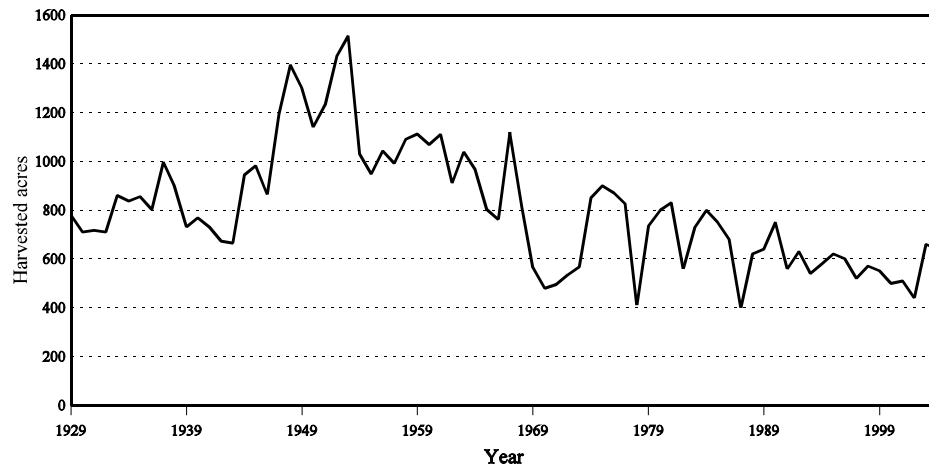
Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
2000	530	500	72	36,000	2.11	75,960
2001	520	510	64	32,640	2.43	79,315
2002	450	440	67	29,480	3.28	96,694
2003	680	660	68	44,880	3.25	145,860
2004	660	640	64	40,960	3.00	122,880

¹ Marketing year average.

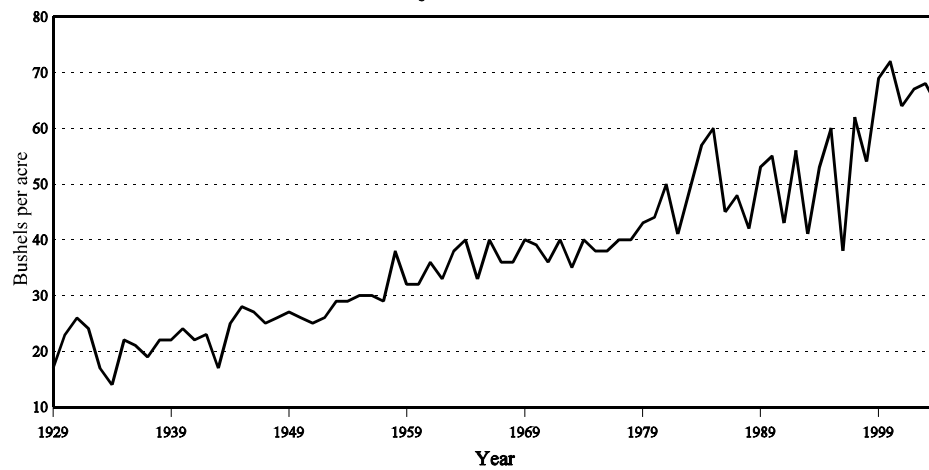
Wheat: Stocks by quarter, 2000-2004

Crop year	September 1		December 1		March 1		June 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
2000	7,000	28,950	4,100	22,400	3,000	17,150	800	12,380
2001	4,500	25,900	3,300	19,700	1,200	16,050	600	11,330
2002	2,800	23,700	1,200	15,700	400	12,450	300	6,275
2003	5,000	28,430	2,800	23,050	600	15,190	300	7,310
2004	7,800	28,430	3,500	25,000	2,900	16,470	800	14,330

Wheat harvested acres, 1929-2004



Wheat yield, 1929-2004



Wheat production, 1929-2004

